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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/645,619	08/25/2000	Tomoaki Kurano	PM 273762	4340

7590 11/04/2005

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EXAMINER

VENT, JAMIE J

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/645,619

Applicant(s)

KURANO ET AL.

Examiner

Jamie Vent

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 11-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 11-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Response to Argument

Applicant's arguments with respect to claims 1, 2, 3, and 4 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 3, 4, 11, 12, 13, 14, 15, 16, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barton et al (US 6,233,389) in view of Hirayama et al (US 5,630,006) in further view of Yasukohchi et al (US 6,278,837).

[claims 1 & 3]

In regard to Claims 1 and 3, Barton et al discloses a multichannel recording device configured to record data on a disk-shaped recording medium that includes an object area in which object data corresponding to programs are recorded and a management area in which management data is recorded (Figure 1 shows the record able/reproducible optical disk wherein object data and management data are stored as further seen in Figure 6 and described in Column 5 Lines 33+), said multichannel recording device comprising:

- Recording means for alternately recording the object data, obtained by the encoding means and corresponding to the first and second programs, in the object area of the disk-shaped recording medium such that the object data are

recorded based on a data length that enables continuous data reproduction (Figure 2 shows the recording of audio/video data onto video objects wherein first program and second program information are recorded based on the length of the program chains as further described in Column 4 Lines 23+);

- Reproduction means for reproducing the object data which the recording means records in the object area (Column 8 Lines 38+ describes the reproducing of the object data which is further recorded onto the recording medium);
- Receiving means for simultaneously receiving a first program and a second program which are different from each other (Figure 2 shows receiving of simultaneously received programs);
- Control means for recording the management data in the management area of the disk-shaped recording medium (Figures 1 shows the media switch 102 which controls the recording of management data onto the storage device as described in Column 3 Lines 62+); however, fails to disclose the following limitations:

- management data controls the reproduction means to reproduce the first and second programs in an order determined by channel numbers or recording start times
- Encoding means for encoding the first and second programs in parallel so as to obtain object data corresponding to the first and second programs.

Hirayama et al discloses a multi-scene recording medium for reproducing data wherein the user is able to select various scenes from various input areas. As seen in Figure 3a the management control data controls the reproduction of the first and second programs by start

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times as it takes data from camera #1 and camera #2 as described in Column 6 Lines 5-23. Furthermore, it is seen in Figure 12 and described in Column 11 Lines 1-44 the order of the programs that are determined by the start times of the recordings. By allowing control of the recording of management data to allow reproduction selected due to recording start times allows for better flow between the data segment programs which allow for a better quality picture during playback.

Yasukohchi et al discloses a multichannel recording and reproducing apparatus as seen in Figure 1 wherein a video data is received into the system consisting of two programs through video input 101-1 and video input 101-2 and as further described in Column 3 Lines 32-49. Furthermore it is seen in Figure 1 each video stream entering into the system is encoded before it is determined which video stream will be selected for viewing and/or recording. The parallel processes of the two streams can further be seen in Figures 6a and 6b. The receiving of two program streams of different content and encoding each stream in parallel allows for the system to process various video inputs into the system and allows user to select recording of the desired program stream thereby giving the user various options for viewing recording. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a multi-channel recording devices with object and management areas, as disclosed by Barton et al, and incorporate the use of management data controls to reproduce the first and second programs in an order determined by the recording start times, as disclosed by Hirayama et al, to allow an integration of the program segments from the various channels, and furthermore incorporate a system that encodes the first and second programs in parallel, as disclosed by Yasukohchi et al, which would allow for a complete system for the viewer to select various recording and viewing options through the multichannel recording device.

[claims 2 & 4]

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In regard to Claims 2 and 4, Barton et al discloses a multichannel recording device with the same limitations as stated in Claim 1, with the additional feature comprising a control means for recording the management data in the management area of the disk-shaped recording medium, wherein the management data controls the reproduction means to reproduce a requested program, the requested program being one of the first or second programs (Column 4 Lines 34+ describes the reproducing of the requested program being one of the programs that are recorded).

[claims 11, 12, 13, & 14]

In regard to Claims 11, 12, 13, and 14 Barton et al discloses a multichannel recording device wherein each program is recorded at a specific data length; however, fails to disclose the digital data constituting said first and second programs are being alternately recorded on said disc shaped recording medium, if there is an area in the recording direction where other data are recorded, said control means skips the area during the recording. Hirayama et al discloses a multi-scene recording medium wherein the recordings are being done alternately on a the recording medium as seen in Figure 3b wherein each camera provides a program and the program bars are being alternately recorded onto the recording medium as further stated in Column 5 Lines 61-67 and Column 6 Lines 1-16. Furthermore, it is seen that in Figure 16 data in the form of parental control is found on recording medium wherein after prompting the user for a code the data area is skipped over for recording purposes as further stated in Column 13 Lines 17+. Thereby, the skipping of the parental control area skips the area for recording/reproducing when a code is not provided and thereby meets the limitation of skipping a recorded area. Therefore, it would be obvious to one of ordinary skill in the art to use a multichannel recording device wherein segments are recorded to a specific length, as disclosed by Barton et al, and incorporate recording of programs alternately, as disclosed by Hirayama et

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al, which would allow for a seamless recording/reproduction of various input sources, such as multiple channels, onto one recording medium.

[claims 15, 16, 17, & 18]

In regard to claims 15, 16, 17, and 18, Barton et al discloses a multichannel recording device; however, fails to disclose a recording method specified data length unit is a CDA unit.

Yasukochi et al shows in Figure 5 the boundaries of ECC block units and thereby meets the limitation of a CDA unit which is a "limited number of ECC block units" as stated in the applicant's specification on page 13. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the multichannel recording device, as disclosed by Barton et al, and incorporate a recording method with a specific data length, as disclosed by Yasukochi et al, to allow for proper management of the data units.

[claims 5, 6, 7, 8, 9, & 10]

Claims 5, 6, 7, 8, 9, and 10 are cancelled.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Yasukochi et al (US 6278737);
- Teunissen (US 6512882);
- Ito et al (US 6411770).

Contact Fax Information

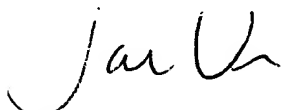
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamie Vent whose telephone number is 571-272-7384.

The examiner can normally be reached on 7:30am-5:00pm.

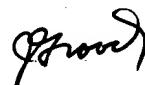
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on 571-272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jamie Vent
10/26/2005



James J. Groody
Supervisory Patent Examiner
Art Unit 262 2616